

Notice of Allowability

Application No.

10/684,899

Examiner

Tina M. Wong

Applicant(s)

LITTLE, BRENT E.

Art Unit

2874

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to a Request for Continued Examination received 19 October 2005.
2. ☒ The allowed claim(s) is/are 1,2,6-10 and 15.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

John D. Lee
John D. Lee
Primary Examiner

DETAILED ACTION

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 19 October 2005 has been entered.

Examiner's Statement Of Reasons For Allowance

Applicant's arguments and affidavit filed on 19 October 2005 have been fully considered. Claims 1, 2, 6-10 and 15 are therefore allowed.

The following is an examiner's statement of reasons for allowance:

The prior art of record in this application fails to disclose or reasonably suggest an integrated optical mode shape transformer comprising a composite waveguide supporting an input end with an input fundamental mode with a first spot size, an output end supporting an output end with an output fundamental mode having a second spot size smaller than the first spot size, the composite waveguide further comprising a first waveguide layer and a second waveguide layer with different refractive indices and thicknesses, the second layer to further have a width laterally tapered down from the input end to the output end, where the second waveguide layer is on top of the first waveguide layer.

A close prior art of record is U.S. Patent Application Publication 2003/0053756 to Lam et al and U.S. Patent Application Publication 2003/0044118 to Zhou et al, relied upon in the previous Office action, mailed 01 September 2005, paper number 082005. However, the

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Affidavit presented by Applicant on 19 September 2005, under 37 CFR 1.131 is sufficient to overcome the Lam et al and Zhou et al reference.

Furthermore, another close prior art of record is currently cited U.S. Patent Application Publication 2002/0085602 to Park et al. Park et al also discloses a spot-size converter with two waveguide layers, where the top waveguide layer is tapered laterally. However, Park et al fails to disclose a comparison between the spot size of the input and output end of the converter, more specifically, Park et al fails to disclose the spot size of the input end to be larger than that of the output end. Additionally, the Affidavit presented by Applicant on 19 September 2005, under 37 CFR 1.131 is also sufficient to overcome the newly cited Park et al reference.

Therefore, claims 1, 2, 6-10 and 15 are allowed.

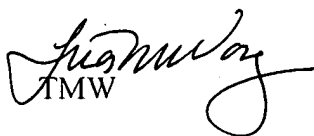
Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tina M. Wong whose telephone number is (571) 272-2352. The examiner can normally be reached on Monday-Friday 8:30-5:30.

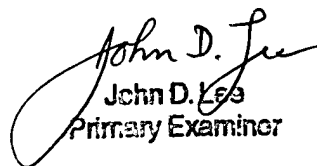
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney Bovernick can be reached on (571) 272-2344. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



TMW



John D. Lee
John D. Lee
Primary Examiner